

CHAPTER 7

ADVANCE MEASURES

7-1. General. See Chapter 7, ER 500-1-1, for pertinent policy.

7-2. Types of and Eligibility for Advance Measures Assistance. Advance Measures assistance may be in the form of technical or direct assistance. Refer to ER 500-1-1, paragraphs 7-2 and 7-3, for types of and eligibility for Advance Measures assistance that may be provided.

7-3. Advance Measures Situations and Applications.

a. **Imminent Danger of Flooding.** Advance Measures Assistance may be provided in order to prevent or reduce flood damage when there is an imminent threat of unusual flooding. Advance Measures assistance is limited to those necessary to prevent or reduce impacts of floods that (1) pose a significant threat to life and/or improved property, and, (2) the proposed assistance is beyond the capability of local interests and the State to perform in a timely manner.

b. **Imminent Danger of Levee Failure/Overtopping.** Advance Measures Assistance may be provided for levee projects that are in imminent danger of failure/overtopping. In such cases, Advance Measures can be employed to undertake minimum corrective action to ensure the stability, integrity, and safety of such projects. Actions should be limited to those necessary to prevent imminent failure of a project that (1) poses a significant threat to life and/or property, and, (2) the proposed assistance for the project is beyond the capability of local interests and the State to perform in a timely manner.

c. **Snowmelt from Abnormally High Snowpack.** Advance Measures to prevent predicted riverine or closed-basin flooding from heavy snowmelt are appropriate when based on measured conditions. Indicators to be measured include snow depths, snow water content, soil moisture content and frost penetration depth. Based on these measured conditions, and published forecasts, USACE and the National Weather Service (NWS) can forecast river/lake stages to determine if an imminent flood threat exists.

d. **Federal Channels.** Channel clearance and dredging to restore original project design capacity is permitted if predicted flood flows cannot be passed and flooding is likely to occur.

e. **Non-Federal Channels.** Channel clearance and dredging to restore original project design capacity is permitted if predicted flood flows cannot be passed and flooding is likely to occur. Field reconnaissance will determine the required additional capacity to pass the predicted flood flows.

f. Snags/Log Jams/Debris Obstructions. Removal of snags, log jams, and debris in streambeds is permitted to prevent the impoundment of water that would cause unusual flooding and produce significant amounts of damage to improved property.

g. Dam Failures.

(1) Advance Measures assistance is permitted to relieve the threat of flooding from dam failures when predicted inflows/river stages will result in catastrophic failure. An imminent loss of life or damage to improved property downstream of the dam must exist. Assistance may involve dewatering of the impoundment, controlled breaching of the structure, or repair/strengthening of the structure, depending on the time available and the costs involved versus the benefits. Permanent restoration/rehabilitation of the structure is the owner's responsibility.

(2) USACE may assist state and local interests in the formulation of an evacuation plan.

(3) If actual dam failure is occurring, response operations using Class 210 funds should be undertaken in accordance with Chapter 4, ER 500-1-1.

h. High Lake Levels. If an imminent flood threat period exists due to record or near record lake levels and significant flood damage will occur during lake storm seasons, the construction of temporary flood control works and/or the modification of existing flood control works is authorized. If the high lake levels are cyclical, and recurring imminent flood threat periods can be expected, a waiver of the local sponsor requirements to remove the temporary flood control works may be requested in order to require the local sponsor to maintain and upgrade the flood control works. State and/or local fund contributions will normally be 25 percent of the cost of construction.

7-4. Procedures.

a. Initial Report. A telephonic report or situation report will be made through MSC to HQUSACE (CECW-OE) as soon as there is an indication that an Advance Measures request may be received.

b. Governor's Request. The Governor's letter will contain the following information:

(1) A description of the state and/or local efforts undertaken.

(2) A statement that the State has committed all available resources.

(3) The specific location(s) and type of assistance needed.

(4) The name of the project sponsor.

(5) Additional commitments to be accomplished by the State.

c. **Actions Following Receipt of Governor's Request.** Following receipt of the Governor's written request, an investigation will be conducted to determine if USACE Advance Measures assistance is appropriate, and the type of USACE assistance to be provided.

d. **Processing and Approval Process.** If assistance appears appropriate, an Advance Measures PIR will be prepared by the District in accordance with Figure 7-1. The PIR Review Checklist (format at Figure 7-2) will be included as Appendix Z to the PIR. The Checklist must be completed and signed by the Emergency Manager or the Project Officer for the Advance Measures project. The PIR will be submitted through the MSC to HQUSACE (CECW-OE) as expeditiously as possible, but not later than 30 days after the date of the Governor's written request. A separate PIR will be prepared for each requested project. The MSC will act on the PIR within 5 days of receipt. HQUSACE will take action within 5 calendar days of receipt of the recommendation from the MSC commander. To expedite the review process, MSC's are encouraged to submit the district's PIR for concurrent MSC and HQUSACE review.

e. **Cooperation Agreement.** A CA (see Figure 7-3) will be executed with the public sponsor prior to the provision of assistance.

f. **Denial Letter.** If USACE assistance is denied, the district will transmit a letter to the Governor detailing why assistance is not available. A copy of the request and denial letter will be furnished to HQUSACE through MSC headquarters.

g. **Funding.** Funding will be in accordance with ER 11-1-320. For the execution of an approved Advance Measures project, funds will normally be provided concurrently with the approval of the project.

h. **USACE Costs.**

(1) **Field Investigation Costs.** Any expenses for conducting the preliminary review and for the preparation of the PIR and supporting documents will be charged as field investigation costs. Any technical assistance provided is also a field investigation cost. Field investigation costs will be charged to Class 520.

(2) Project Costs. These costs are any expenses necessary for the preparation of the plans and specifications, purchases, equipment rentals, contracts, and supervision and inspection during construction phase. Project costs will be charged to Class 510.

i. Fiscal Closeouts. EM elements will ensure that actions for closing emergency activities are accomplished in accordance with ER 11-1-320, within 60 days of completion of Advance Measures activities.

**PROJECT INFORMATION REPORT
ADVANCE MEASURES**

Part I. Executive Summary

Part II. Basic Report

1. NAME AND LOCATION - *Project name; city, county, and state.*
2. PUBLIC SPONSOR - *Name, address, telephone number, and email address for the public sponsor of the proposed project.*
3. SUMMARY OF THE CONDITIONS CAUSING THE IMMINENT THREAT OF UNUSUAL FLOODING - *Additional documentation may be included at Appendix B.*
4. COURSE OF ACTION OPTIONS - *List options available to address the problem. Extensive information or tabular data will be placed in Appendix C.)*
5. PROPOSED WORK - *Of the options in paragraph D. above, provide an explanation and description of the proposed work. Necessary additional information may be placed in Appendix C.*
6. ECONOMICS. - *Refer to Appendix C of EP 500-1-1 for economics format. State the benefit cost ratio of the proposed option, and the anticipated damages avoided attributable to the Advance Measures project. Provide a description of the communities and numbers of people benefiting from the proposed work. The detailed economic information and calculation of the BCR will be provided in Appendix D of the PIR.*
7. PUBLIC SPONSOR'S SHARE OR CONTRIBUTION - *Description of actions the local interests and the State are undertaking to resolve the problem.*
8. ENVIRONMENTAL CONSIDERATIONS. *Provide a general summary of environmental considerations. Specific statements, e.g., statement on effect of work on environment; Environmental Assessment, Section 7 of the Endangered Species Act of 1973 (PL 93-205) considerations; Archeological Investigations and Salvage Activities consideration per ER 1105-2-460, permits, etc, will be provide in Appendix C, as separate annexes.*
9. PERMITS. *List the need for any permits (Federal, s tate or local) and indicate potential problems with obtaining these permits.*

Part III. Appendices

- Appendix A. Governor's request for assistance; any other correspondence from the potential project sponsor.
- Appendix B. Data and documentation addressing the imminent threat of unusual flooding.
- Appendix C. Data to support courses of action.
- Appendix D. Economic data, to include calculation of benefit to cost ratio.
- Appendix E-Y. As needed.
- Appendix Z. PIR Review Checklist.

Figure 7-1. PIR Format, Advance Measures

PIR REVIEW CHECKLIST FOR ADVANCE MEASURES			
	<u>YES</u>	<u>NO</u>	<u>N/A</u>
1.	___	___	
An imminent threat of unusual flooding has been established. [ER, 7-1.a.]			
2.	___	___	
There are no other USACE authorities that apply - Advance Measures is the only USACE option available to address this situation. [ER, 7-1.a.]			
3.	___	___	
The assistance supports and supplements tribal, state and local efforts. [ER, 7-1.b.]			
4.	___	___	
The governor requested the assistance in writing. [ER, 7-1.c.]			
5.	___	___	
The assistance is not solely for erosion control. [ER, 7-1.d.]			
6.	___	___	
The work does not make a permanent modification to an existing project to increase the degree or level of protection. [ER, 7-1.f.]			
7.	___	___	
The project has a favorable (>1.0) benefit cost ratio. [ER, 7-1.g.]			
8.	___	___	
The work is temporary in nature. [ER, 7-1.h.]			
9.	___	___	___
If the work is not temporary in nature, the sponsor is willing and able to cost share at 75% Federal and 25% local share. [ER, 7-1.m.(2)]			
10.	___	___	
Any permanent work is justified and properly documented. [7-1.h.]			
11.	___	___	
The public sponsor has agreed to sign a Cooperation Agreement. [ER, 7-1.i.]			
12.	___	___	
The public sponsor has agreed to remove all temporary work to be constructed by USACE, or upgrade it to USACE standards. [ER, 7-1.i.]			
13.	___	___	
The completed PIR has been reviewed and the PIR Checklist has been reviewed and signed by the Emergency Management Office. [EP, 7-4.d.]			
14.	___	___	
The completed PIR meets all policy, procedural, content, and formatting requirements of ER 500-1-1 and EP 500-1-1. [ER, 2-3.b.]			
REVIEWING OFFICIAL'S SIGNATURE:			
NAME:			
TITLE:			
TELEPHONE NUMBER:			
<i>Page Z-1</i>			

Figure 7-2. PIR Review Checklist (Appendix Z) for Advance Measures

**COOPERATION AGREEMENT
BETWEEN
THE UNITED STATES OF AMERICA
and**

**for
ADVANCE MEASURES ASSISTANCE**

THIS AGREEMENT, entered into this _____ day of _____, 20_____, by and between THE DEPARTMENT OF THE ARMY (hereinafter referred to as the "Government") represented by the District Engineer, _____ District, U.S. Army Corps of Engineers, and the _____ [PUBLIC SPONSOR], (hereinafter referred to as the "Public Sponsor"), represented by _____ [TITLE OF PERSON SIGNING THIS AGREEMENT].

WITNESSETH THAT:

WHEREAS, 33 U.S.C. 701n authorizes the Chief of Engineers to provide Advance Measures.

WHEREAS, the Public Sponsor has requested, in writing, assistance under 33 U.S.C. 701n and qualifies for such assistance in accordance with the established policies of the U.S. Army Corps of Engineers; and,

WHEREAS, the Public Sponsor hereby represents that it has the authority and legal capability to furnish the non-Federal cooperation hereinafter set forth and is willing to participate in accordance with the terms of this agreement.

NOW, THEREFORE, the parties agree as follows:

1. The Government will perform the work described in its scope of work, which is made part of this agreement.
2. The Public Sponsor will:
 - a. Provide without cost to the Government all lands, easements, rights-of-ways, relocations, and borrow and dredged or excavated material disposal areas necessary for the work.

Figure 7-3. Cooperation Agreement for Advance Measures Assistance

b. Hold and save the Government free from damages arising from construction, operation, maintenance, repair, replacement, and rehabilitation of the work, except damages due to the fault or negligence of the Government or its contractors.

c. Operate, maintain, repair, replace, and rehabilitate the completed work in a manner satisfactory to the Government; and

d. Remove all temporary work constructed by the Government, with initiation of removal within 30 days of the conclusion of the flood event.

3. The Public Sponsor further agrees to: (Add as applicable)

4. ATTACHMENTS:

a. Exhibit A - Written request for assistance from the Public Sponsor.

b. Exhibit B - Government Scope of Work.

c. Add others as applicable.

IN WITNESS WHEREOF, the parties hereto have executed this agreement of the day and year first above written.

THE DEPARTMENT OF THE ARMY

THE [NAME OF PUBLIC SPONSOR]

BY: _____

BY: _____

[SIGNATURE]
[TYPED NAME]
[TITLE IN FULL]

[SIGNATURE]
[TYPED NAME]
[TITLE IN FULL]

ADDRESS:

ADDRESS:

**Figure 7-3. Cooperation Agreement for Advance Measures Assistance
(Continued)**